

## Description

# Attach and carry and attach and pull multi purpose handle

### SUMMARY OF INVENTION

[0001] Applicant claims the benefit of earlier US Provisional patent application 60/521,441. Carrying heavy and or bulky items such as one or five gallon paint cans, one gallon milk or water jugs, suitcases, or other heavy and or bulky items with uncomfortable handles can be difficult and cumbersome. Carrying heavy and or bulky items that don't have traditional handles such as five gallon water bottles, can also be very difficult and uncomfortable. In addition, gripping and pulling items such as some bulky suitcases or garden stakes out of the ground can be very difficult. This invention enables a light weight heavy duty portable handle to be easily attached to these items and other similar items to provide a more comfortable and manageable manner in which to carry them, or pull them. This invention can be attached to items 2" in diameter or

less.

## BRIEF DESCRIPTION OF DRAWINGS

[0002] Fig 1 shows a full frontal view of this invention. The scale is approximately 75% of actual size. Item 1 is the carrying handle which is made from a variety of materials including bamboo, metal, or plastic, based on the ruggedness required by the user. The handle is four inches long and approximately 5/8 " in diameter. The handle can be customized by burning or stamping Chinese symbols or English words into its top, based on the wishes of the customer. If the handle is made from bamboo, it is treated with a lacquer finish to enhance the appearance of this invention, as well as provide additional protection for the handle. Item 2 is heavy duty polypropylene twine and extends from the middle of the handle nine inches and then returns and reattaches back to the middle of the bamboo handle. Item three is 1/4" clear vinyl tubing. The vinyl tubing both protects the polypropylene twine and acts as a grip especially when carrying five gallon water bottles, or when pulling garden stakes out of the ground. Item 4 is a plastic bead that is metalized and is 25 x 11 mm. This metalized bead enhances the products appearance and provides a means to easily string the polypropylene twine

through the handles of the various items it is attaching to. Item 5 is a 10 mm plastic melon bead that is metalized. It enhances this invention's appearance and allows the polypropylene twine to loop back through item 4 and complete a full circle back to the handle.

[0003] Fig 2 shows a full side view of this invention. The scale is approximately 75% of actual size. Item 1 shows that each end of handle plugged by cork if made from bamboo, or plastic if made from plastic, or metal if made from metal. This prevents dirt and other unwanted material from collecting in the hollow handle.

[0004] Fig 3 shows the bottom of the handle. The scale is approximately 75% of actual size. Item 1 shows the polypropylene twine attaching to the middle of the handle via holes drilled into the handle. Both holes are located in the middle of the handle and are approximately 1/4 " apart. The polypropylene twine is pulled through each hole and then knotted to prevent the twine from pulling back through the drilled hole, thus fastening the twine to the handle. The knots are hidden within the hollow handle.

[0005] Fig 4 shows the first step to attach this invention to a variety of items. The scale is not intended to be accurate,

but instead to illustrate how the invention is attached. In this example the handle is being attached to two paint cans. However, this invention can attach to any item that has handles. The vinyl covered polypropylene string is pulled through the handles of the item(s) to which it is going to be attached. The large plastic metalized 25x11 mm bead helps guide the vinyl covered polypropylene twine through the paint handles. It also provides a convenient area to hold on to when attaching and de-attaching this invention.

[0006] Fig 5 shows the next step to attach this invention to the two paint cans. The scale is not intended to be accurate, but instead to illustrate how the invention is attached. The end of the vinyl covered polypropylene twine is pulled up to create a small loop. The handle is turned perpendicular to the loop and then inserted through the loop (per the direction of the arrow shown).

[0007] Fig 6 shows the result of inserting the handle through the loop created in fig 5. The scale is not intended to be accurate, but instead to illustrate how the invention is attached. This invention is now fully attached to the item(s) and is ready to be used. The process is reversed to remove this invention from the item(s).

[0008] Fig 7 illustrates an example of this invention attaching to a standard five gallon water bottle. The scale is not intended to be accurate, but instead illustrate how this invention can attach to an item without a traditional handle. The vinyl tubing covering the polypropylene twine grips the plastic water bottle top once the cord is tightened. The same principle applies when using this invention to pull suitcases that for a variety of reasons are otherwise difficult to do, or to pull garden stakes out of the ground, or other similar acts.

#### **DETAILED DESCRIPTION**

[0009] This invention is made as follows: 3/8" diameter bamboo, plastic, or metal is cut at four inches in length. Two holes are drilled in the middle of the handle. The holes are approximately 1/4" apart. The first end of the polypropylene twine is inserted into one drilled hole and pulled through the hollow handle. The end of the twine is then knotted and pulled back toward the hole it was pulled through. The polypropylene twine is then strung with 7.5" of 1/4" clear vinyl tubing. The vinyl tubing protects the polypropylene twine and provides a natural gripping result. This is important when attaching to the end of a five gallon water bottle. The 25x11 mm plastic metalized bead is then

strung on the twine. Then the 10 mm plastic melon bead is strung on the twine . The polypropylene twine is then looped back through the 25x11 mm metalized bead. Then another 7.5" of 1/4" clear vinyl plastic tubing is strung on the twine. The remaining end of the twine is pulled through the other hole that was previously drilled in the handle and is pulled through the hollow end of the handle and knotted and then pulled back toward the hole it was pulled through. Cork, a plastic cap, or metal cap is then inserted and glued approximately 1/4" into each hollow end of the handle . A Chinese symbol or English words are then burned or stamped into the top of the handle based on the wishes of the customer. If the handle is made from bamboo it is then lacquered which completes the manufacturing process. If not bamboo, the manufacturing process does not include a lacquering step. Each finished product is tested to lift a minimum of 50 pounds. Each handle weighs from one to three ounces depending on the material the handle is made from.